Communicable Disease Report

Hawai'i Department of Health Communicable Disease Division

November/December 2001

Dengue Fever: Outbreak Update

Outbreak Summary

As of October 26, 2001, a total of 69 cases have been laboratory-confirmed by the Centers for Disease Control. The following is a summary of the hometown of the cases.

Maui: - Hana area – 45, Haiku – 3, Lahaina – 2, Pukalani – 1, Makawao – 1, Paia – 1, Kihei – 1, and Wailuku – 1.

Oahu: Laie – 5, Waiahole – 2, Kailua – 1, Honolulu - 1, and Aiea – 1.

Kauai: Kalaheo – 1, Anahola – 1, Princeville – 1, and Hanalei – 1. See Figure.

To date, the CDC has confirmed 13% of those suspected of having the illness, while 254 (42%) need to submit a sec-

ond serum sample to determine whether or not their illness was due to dengue fever. 307 (45%) were found **not** to be infected with dengue fever by the CDC test. In addition 296 clinical illnesses are under investigation on five islands.

All residents and employers statewide are encouraged to be aware of personal mosquito protection measures, and be responsible for environmental mosquito control on their properties.

DOH Activities

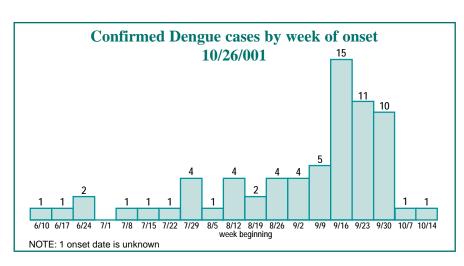
The Department of Health (DOH) is currently taking aggressive mosquito control activities, conducting heightened surveillance activities, and sponsoring an extensive statewide education and outreach program. Vector Control staff are spraying suspected areas statewide where there is evidence of possible transmission. Mosquito samples are also being taken to identify vectors (mosquitoes). Epidemiology staff is closely monitoring all infectious activity, investigating reports, mapping areas, and compiling information needed to control the outbreak. Statewide information networks are also being used to advise all hospitals, emergency rooms, infection control units and physicians on procedures for reporting suspected cases and recommendations for patients. Public Health nurses and health educators are working on extensive outreach activities to inform the community. District Health Offices in each county are working with their communities on ways to control or prevent outbreaks.

The DOH is encouraging all residents, visitors, businesses, schools, church groups and other organizations to actively participate in clearing mosquito breeding areas, spraying homes and private property, and practicing precautionary measures.



Between 1992-2000, 0-8 cases per year of **imported** (contracted outside the State) dengue fever were reported to the DOH.

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Dengue Fever: Update

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- In July 2001, the DOH observed an increase in the number of imported cases diagnosed in Hawaii. Most of these cases had recently returned from the Society Islands or American and/or Western Samoa. It was discovered all three countries were experiencing epidemics of Dengue fever. Vector Control crews were dispatched to the homes of the cases to initiate mosquito control activities to prevent spread of the virus.
- August 3. The DOH issued a statewide medical alert to all physicians warning them of the increase in the imported dengue cases, and to consider the disease in a differential diagnosis of undiagnosed febrile illnesses.
- September 6. The DOH bimonthly Communicable Disease Report was mailed to physicians, and included an update of the alert sent out the previous month.
- September 12. The Maui District Health Office was notified by a physician of a suspected case of Dengue fever in a Nahiku (East Maui) resident.
- September 13. The Maui District Health Officer and Epidemiological Specialist went to Hana to investigate. It was determined that the patient had no recent off-island travel history.
- September 14. Another statewide febrile illness alert was sent out to all

- physicians. Screening diagnostic test kits were ordered.
- September 15. A town meeting in Nahiku was attended by the Maui District Health Officer to explain the importance of mosquito control/ prevention if this illness was due to Dengue fever.
- September 17. Maui Vector Control began aggressive mosquito fogging in the Hana area.
- September 17-18. Oahu epidemiology staff are sent to assist the Maui district health office.
- September 19. The first positive screening tests are received.
- September 20-21. Active surveillance case finding plans are made.
- September 21. The CDC confirms Dengue fever in the Nahiku patient.
- September 23. A medical alert is sent to all Maui health care practitioners.
- September 24. Active sentinel surveillance is initiated at 14 Maui sites.
- September 25-26. The DOH conducts house-to-house case finding in the Nahiku-Hana-Hamoa area.
- September 26. Vector Control Honolulu sent staff members to assist Maui in mosquito control activities.
- September 26. The Vector Control branch began spraying homes on Oahu of all people with suspected dengue fever.
- September 27. CDC test results on East Maui residents shows the first case occurred in mid-June. The early cases did not seek medical attention.
- September 27. Vector Control implemented the Maui emergency plan of

action.

- September 28. A Medical Alert is sent to Maui health care practitioners on mosquito control.
- September 30. The first CDC team member arrives.
- October 1. The Vector Control branch ships two vehicles, spraying equipment and larvicides to assist in the Maui control effort.

- October 1. The Vector Control Branch ships 258 cases of mosquito repellents to the Maui District Health Office.
- October 2. Director of Health Bruce Anderson visits Maui. The first positive screening test result from Kauai is obtained. Active surveillance is initiated statewide to document the presence of Dengue fever in all residents.
- October 3. The Environmental Health Administration/Vector Control plan of action implemented to coordinate east Maui small container bulk item pickup and disposal.
- October 4. Additional CDC support is requested.
- October 6. Additional CDC personnel arrive. A total of eight CDC employees have arrived to assist the DOH is surveillance and control efforts, including a senior entomologist and epidemiologist.
- October 8. The Vector Control Branch ships adulticides to Maui to assist the District Health Office's control efforts.
- October 8. The first Oahu case is confirmed by the CDC.
- October 12. Vector Control implemented a plan of action to provide structural protocol for Maui volunteers conducting premise to premise mosquito surveys in Hana.
- October 16. Based on laboratory results received from the CDC, the outbreak on Maui appears to be declining.
- October 18. Governor Cayetano visits
- October 23. CDC senior entomologist visits infected areas of Oahu
- October 27-28. CDC and DOH Staff begin serological survey on east Maui.

New Recommendations: Dengue Testing

As of October 26, 2001, 768 persons have been tested for dengue fever statewide, and have results available from the CDC laboratory. Of these 12% tested positive for dengue, 39% had an acute sample that tested negative for dengue IgM, and dengue infection was ruled out in 49% of persons. In the most recent batch of tests results received from

Communicable Disease Report

Communicable Disease Division 586-4580 **Epidemiology Branch** 586-4586 Tuberculosis Disease 832-5731 Control Branch Hansen's Disease 733-9831 Control Branch STD/AIDS Prevention Branch 733-9010 STD Reporting 733-9289 AIDS Reporting 733-9010 Information & Disease Reporting 586-4586 After-hours Emergency Reporting 247-2191 (State Operator) After-hours Neighbor Island Emergency Reporting 800-479-8092



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the CDC, only 1.5% of the samples were positive. CDC test results are pending on another 200 persons, but preliminary screening test results for most of these persons are negative.

At present the DOH is asking physicians to use the availability of dengue testing judiciously. We suggest clinicians use the following as a guide to decision making regarding testing an individual for dengue fever.

1) If you strongly suspect the patient has dengue fever – obtain a serum sample for dengue testing at the first visit and schedule the patient for a second blood draw for dengue six days or more after the patient's first day of illness. Please call the DOH to report this illness after the first visit (586-4586 on Oahu, 984-8200 on Maui, 933-0912 on Hawaii and 241-3563 on Kauai).

In general, dengue fever might be seriously considered in patients presenting with a high, persistent fever of unknown origin who also have skin rash, myalgias, headache, retro-orbital pain and/or bleeding manifestations.

- 2) If you think dengue is likely but the patient's illness is non-specific schedule the patient for a follow-up visit six days or more after the patient's first day of illness and, if dengue is still suspected, draw a sample for dengue testing at that time.
- 3) If you do not think dengue infection is likely there is no need to order a test for dengue. The patient should be evaluated and treated for other more common illnesses (e.g. influenza) as appropriate. Although some of the clinical manifestations of dengue and influenza are similar, influenza will primarily present as a respiratory illness with prominent sore throat or cough. Leptospirosis should also be considered in persons with severe febrile illness because specific antibiotic treatment is indicated and should be initiated without waiting for

screening test results. Rapid tests for influenza and screening tests for leptospirosis are available to Hawaii clinicians through their usual commercial clinical laboratories.

The DOH thanks Hawaii's physicians for their prompt and proactive participation in dengue surveillance. We look forward to working with you in refining dengue testing strategies to maintain and enhance our ability to detect dengue fever in Hawaii while ensuring optimal use of laboratory resources.

For more information, please call the DOH Dengue information number at: (808) 586-8352 in Honolulu. For regular updates, visit the Hawaii State DOH website at http://www.state.hi.us/doh/dengue/index.html.

Submitted by David M. Sasaki, D.V.M., M.P.H., Veterinary Medical Officer, Epidemiology Branch.

Anthrax Alert

As of October 26, 2001, environmental laboratory analysis of all suspicious substances evaluated by the State Laboratories Division and the Navy Environmental Preventive Medicine Unit 6 have been **negative** for anthrax spores. There have been no clinical cases of anthrax and no known reports of laboratory specimens positive for anthrax in clinical laboratories in the state. Environmental analysis of suspicious substances for anthrax and monitoring of clinical laboratories for evidence of anthrax is continuing.

Asymptomatic persons **without** exposure to a documented environmental sources of *Bacillus anthracis* do not require prophylactic antibiotics. It is important to provide reassurance to patients about the rarity of infection without known exposure. There is no screening test available for detection of anthrax infection in asymptomatic persons. Nasopharyngeal swabs and blood serum tests should not

be used for diagnosis or screening. They are helpful tools as part of an epidemiologic investigation following a documented source exposure to anthrax, or to help confirm an actual case.

Post-exposure Prophylaxis. Post-exposure prophylaxis is indicated in asymptomatic persons **with** exposure to an environmental source that has been **documented as positive** for *B. anthracis* spores.

- → Adults. Initial empiric prophylaxis is ciprofloxacin 500 mg. orally twice daily. An alternative choice is doxycycline 100 mg. orally twice daily.
- → Children.
 - Ciprofloxacin 15-20 mg/kg orally twice daily not to exceed a daily dose of one gram.
 - Doxycycline 100 mg. orally twice daily can be used in children over eight years of age.
 - For children less than eight years of

- age, doxycyclline 2.2 mg./kg. orally twice daily, not to exceed 100 mg. twice daily, may be prescribed. The benefit of using doxycycline in a true anthrax exposure outweights the potential side effects of the antibiotic.
- Amoxicillin. If antibiotic susceptibility studies confirm that the organism is susceptible to penicillin, the prophylaxis can be changed to oral amoxicillin, 40 mg./kg. body weight daily divided into three equal doses (not to exceed 500 mg) three times daily for children <20 kg. body weight; and amoxicillin 500 mg. orally three times daily for children >20 kg. body weight...

The duration of prophylaxis is 60 days.

Confirming a diagnosis. If patients present with symptoms after exposure to an

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Anthrax Alert

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unknown substance, a standard medical evaluation should be performed to determine the appropriate diagnosis and treatment. Patients should not automatically be assumed to have anthrax unless environmental microbiology tests are positive. For ill patients presenting with symptoms compatible with anthrax, the diagnosis should be confirmed by obtaining appropriate laboratory specimens based on the clinical form of anthrax suspected.

- Inhalation anthrax: blood culture, cerebrospinal fluid tests (if meningeal signs are present), and a chest x-ray.
- Gastrointestinal anthrax: blood cul-
- Cutaneous anthrax: vesicular fluid and blood for microbial stains and culture.

In summary, antibiotic treatment specific for anthrax should only be administered if the attending physician strongly suspects anthrax, or if symptoms compatible with anthrax occur in the setting of an environmental exposure positive for anthrax.

Anthrax: A Review

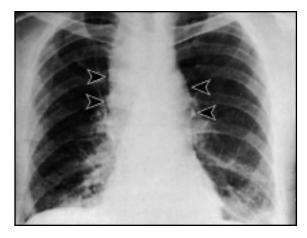
Definition

Anthrax is an acute bacterial zoonotic disease caused by the spore forming gram-positive rod, *Bacillus anthracis*. Aerosolized anthrax spores may be used as a biological warfare or terrorism agent that produces a septic respiratory illness characterized by fever, hypoxemia, cyanosis, dyspnea, shock, and hemorrhagic mediastinitis.

A widened mediastinum on chest radiograph in a previously healthy patient with evidence of overwhelming flu-like illness is pathognomonic of inhalational anthrax and should prompt immediate action for search of additional cases (See Figure).

Epidemiology

Anthrax is primarily a disease of herbivores, which acquire infection after coming into contact with soil-borne spores.



Widened mediastinum on chest x-ray typical of inhalation anthrax.

The incubation period is usually 1 to 7 days with a range of up to 60 days. Person-to-person transmission does not occur. Articles and soil contaminated with spores may remain infective for decades. Assume all exposed individuals are susceptible to infection.

Naturally occurring anthrax occurs worldwide, but is rare in the United States. The last anthrax outbreak in Hawaii was in a herd of dairy cattle in 1938. Humans are infected incidentally when they come into contact with infected animals or animal products.

Investigation Criteria

- → Sudden appearance of a large number of patients in the community presenting with an acute febrile flulike illness and having a high case-fatality rate.
- → A single suspected clinical case of anthrax.
- → A single case of anthrax in animals.
- → Report of a positive laboratory test for *Bacillus anthracis*.

Clinical Syndromes

→ Cutaneous: A skin lesion evolving during a period of 2-6 days from a papule, through a vesicular stage, to a depressed black eschar that is surrounded by extensive edema. Untreated cutaneous infection may disseminate producing sepsis and meningitis with a case-fatality rate of 5% to 20%. Cutaneous anthrax accounts for 95% of naturally occurring cases.

- → Inhalation (respiratory): A brief prodrome resembling a viral respiratory illness followed by hypoxia, dyspnea, and radiographic evidence of mediastinal widening. The infection produces a hemorrhagic mediastinitis, hemorrhagic thoracic lymphadenitis, and often a hemorrhagic meningitis. Survival is rare. The effect of therapy on symptomatic respiratory anthrax has been marginal, at least in part because early diagnosis is difficult.
- → Intestinal: Severe abdominal distress followed by fever and septicemia.
- → Oropharyngeal: Mucosal lesions in the oral cavity or oropharynx, cervical adenopathy, cervical edema, and fever.
- → Meningitis: Hemorrhagic meningitis occurs in less than 5% of anthrax cases, and may be a complication of any of the above forms of primary anthrax infection.

Laboratory Confirmation

Laboratory confirmation must be pursued in every case with gram stain and culture of appropriate blood and body fluids on routine media under biosafety level 2 conditions. The standard blood culture should show growth in 6 to 24 hours. Because of the potential for drug-resistant strains, including deliberately modified strains, antibiotic-susceptibility testing should be performed on all isolates.

The laboratory must be informed that *B. anthracis* is suspected, so that the isolation of a bacillus from the blood will not be regarded as a contaminant, and that appropriate biochemical testing and colonial morphology review for *B. anthracis* is performed.

Any questions regarding media and transport should be directed to the SLD Bioterrorism Preparedness Laboratory at (808) 453-6652. The SLD can arrange for rapid diagnostic testing of specimens for anthrax bacillus.

Bioterrorism: A Federal Offense.

All laboratory specimens are considered as evidence. The packaging and transport of bioterrorism suspect specimens must be coordinated with the FBI. A chain of custody document should accompany the specimen from the moment of collection.

Infection Control Measures

Standard barrier precautions are indicated for the duration of illness. Antibiotic therapy sterilizes anthrax skin lesion within 24 hours, but the lesion progresses through its typical cycle of ulceration, sloughing and resolution.

Dressings with drainage from the lesions should be incinerated, autoclaved, or otherwise disposed of as biohazardous waste. Autoclaving and incineration are acceptable procedures for the decontamination of laboratory materials. Spores require steam sterilization, autoclaving, or burning to ensure complete destruction. Hypochlorite is sporicidal and acceptable for environmental cleanup.

Quarantine is not indicated. Immunization of contacts to exposed individuals is not indicated.

More information and details on treatment for anthrax from our Bioterrorism-Related Diseases Manual is available at the Department of Health website http://www.state.hi.us.doh/anthrax. Further information regarding responding to bioterrorism is available from the CDC website at http://www.bt.cdc.gov.

For more information, please call the Communicable Disease Division at (808) 586-4580 in Honolulu.

EDITOR'S NOTE: An MMWR CDC article entitled "BIOTERRORISM: CDC GUIDANCE" focusing on recognition of

illness associated with the intentional release of a biologic agent is available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5041a2.htm. It reviews anthrax, plague, botulism, smallpox, inhalation tularemia and hemorrhagic fevers, and provides guidance for healthcare providers, clinical laboratory personnel, infection-control professionals and State Health Departments.

REFFERENCES

- Lew D.P. Bacillus anthracis (Anthrax), in Mandell, Douglas, and Bennet's Principles and Practice of Infectious Diseases (2000, fifth edition). Chapter 196. Pages 2215-2220.
- 2. Inglesby TV, Henderson DA, Bartlett JG, et al. *Anthrax as a Biological Weapon. Medical and Public Health Management.* JAMA. 1999, 281:1735-1745.
- Dixon TC, Meselson M, Guillemin J, Hanna PC. *Medical Progress: An-thrax*. NEJM. 1999, 341: 815-826.

Submitted by Philip P. Bruno, D.O., F.A.C.P., Chief, Communicable Disease Division.

Scombroid Fish Poisoning: A review

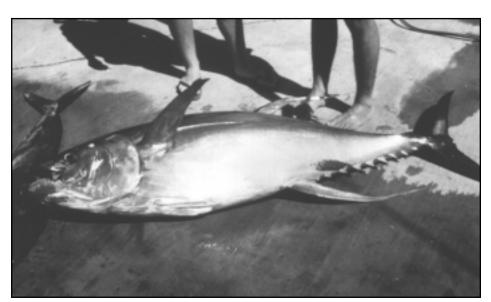
Definition

A histamine intoxication resulting from ingestion of improperly stored scombroid and other pelagic fishes (e.g. mahi-mahi).

Epidemiology

A common fish poisoning that occurs worldwide in temperate and tropical waters. Scombroid poisoning occurs after eating improperly refrigerated or preserved fish containing high levels of histamine.

Fish implicated in scombroid include dark or red-muscled fish belonging to the family Scombridae, such as albacore,



Ahi: The most common fish associated with scombroid poisoning.

Scombroid Fish Poisoning

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bluefin, yellowfin and skipjack tuna, bonito, mackerel, and saury. Non-scombroid fish have also been implicated, such as mahimahi, sardines, anchovy, herring, amberjack, salmon and marlin.

Fish that cause scombroid have high levels of histidine in the flesh. As a result of improper storage, bacteria with histidine carboxylase activity convert histidine and other scombrotoxins into histamine. The bacteria occur as normal surface flora or secondary contaminants. Conversion of histidine to histamine and other scombrotoxins occurs optimally at 20-30°C, the result of fish that have not been promptly refrigerated after capture. Histamine and related toxins are resistant to freezing, cooking, smoking or canning.

Scombroid Poisoning in Hawaii

Between 1996-2000, 93 incidents involving 167 cases of scombroid poisoning were reported in Hawaii, for an overall mean annual incidence rate (MAIR) of 2.8/100.000 population. Annual cases ranged from 28 to 41. By island, Kauai had the highest rate with a MAIR of 12.4/100,000, followed by Maui with a MAIR of 3.1/100,000, Hawaii with a MAIR of 2.8/100,000 and Oahu with a MAIR of 2.2/100,000. Fifty-one incidents were reported on Oahu, followed by 23 on Kauai, 14 on Hawaii and 5 on Maui. 73% of the cases occurred between the ages of 30-59. The most commonly implicated fish included Ahi (Yellow fin tuna) accounting for 41 incidents (44%), followed by Mahimahi with 22 incidents (24%), Akule with 9 incidents (10%) and Marlin with 8 incidents (9%).

Reporting Requirements

Hawaii Department of Health (DOH) Administrative Rules, Chapter 156, Communicable Diseases, Exhibits A,B, & C requires physicians to report scombroid poisoning cases by telephone as soon as a provisional diagnosis is established.

Clinical Syndromes

A. Summary. Symptoms usually appear abruptly 10-60 minutes following comsumption of contaminated fish. However, illness may occur as short as 5 minutes after ingestion, or delayed for up to 8 hours. Untreated, symptoms typically last for an average of 4 hours, with a maximum of 24 hours. Symptoms often resemble an acute allergic reaction and are frequently misdiagnosed as a fish allergy. Affected fish often have a peppery, sharp, metallic or bitter taste, but may be normal in taste and appearance. Scombroid poisoning is usually a benign, self-limited illness. A more serious illness may be seen in the elderly, asthmatics, or patients taking isoniazid or monoamine oxidase inhibitors. Persons taking antihistamines may be protected.

B. Typical

- Flushing of the skin resembling sunburn, with a sharply demarcated edge confined to the face and upper body.
- Pruritis
- Urticaria and/or angioneurotic edema.
- Throbbing headache
- Gastrointestinal symptoms including nausea, vomiting, abdominal cramps and diarrhea.

Other Clinical Manifestations sometimes present.

- Perioral paresthesias
- Burning of the mouth and gums
- · Conjunctival suffusion
- Palpitations
- Blurred vision
- · Diaphoresis.

C. Severe

- Respiratory compromise
- Malignant arrhthmias
- Hyptension.

Diagnosis

The diagnosis is based on clinical presentation associated with the ingestion of

scombroid or scombroid-like fish within an hour prior to onset.

A case may be confirmed by the detection of histamine (25mg% on mahimahi or 10 mg% on tuna) on a sample of fish ingested by the patient.

The DOH laboratory conducts histamine assays on samples of fish associated with incidents of scombroid poisoning, when submitted by the Epidemiology Branch.

Therapeutic Management

- Histamine-1 antagonists (e.g., diphenhydramine) given orally or parentally provides symptomatic relief.
- Histamine-2 antagonists (e.g. cimetidine) given orally or parentally may shorten duration of illness and control of headache.
- Steroids have **not** been shown to be of benefit.

Severe Scombroid Poisoning: the following may be indicated.

- · Intravenous fluids
- · Inhaled bronchodilators
- Oxygen
- Pressor agents
- Gastric lavage or catharsis, if large quantities were consumed within the previous hour.

Prevention

Fish should be promptly refrigerated after capture and adequate refrigeration ($< 20^{\circ}$ C) maintained until the fish is prepared for consumption.

References

- Chin J, Ed. Control of Communicable diseases Manual, 175h Ed. 2000. APHA, Washington D.C., 209.
- Ansdell VE. Seafood Infection and Intoxication. In Dupont HL, Steffen R, Eds. Textbook of Travel Medicine and Health, 2nd Ed. 2001. Decker, B.C., London, 105-107.

Submitted by David M. Sasaki, D.V.M., M.P.H., Veterinary Medical Officer, Epidemiology Branch.

Remembering James K. Ikeda

EDITOR'S NOTE: James Ikeda began working at the Department of Health (DOH) in 1967 after obtaining a Master's degree in Entomology from the University of Hawaii. He retired in 1999 as Chief of the Environmental Health Services Division, but continued to work for the DOH, most recently organizing and hosting the annual Hawaii Environmental Health Conference held from October 3-5. He passed away on October 6 at age 60, leaving his wife, a daughter and two sons. The following tribute was given at his October 12 memorial service by Gary L. Gill.

When I think of Jimmy, a part of me smiles – he was a rascal, with a sharp wit and an easy smile. I see a twinkle in his eye. I hear him make a wisecrack at his own expense: usually something about his physique, the width of his waistband, his intelligence (or lack of it). I remember what Jimmy shared with us all at his retirement party. He spoke of the things that he valued. He used the word "loyalty."

Jimmy was loyal, – to his friends, his family and his career at DOH. He gave of himself generously to his chosen field of public health. He remained, to his last day, loyal to the cause of protecting people and the environment from harm.

Jimmy began his career at DOH in 1967. He began as a Vector Control Entomologist. At the time, records show he was 5 feet 3 and 3/4 inches tall and 159 1/4 pounds. He grew quickly in experience and stature. By 1971 Jimmy claimed to be 5 feet four inches even (an extra quarter inch) and 165 pounds (a gain of 5 and 3/4 pounds). While Jimmy often joked about his weight, what made him stand out was his professional integrity.

In 1974, a manager of a local feedlot was so impressed by Jimmy's ability and so thankful for the service that he provided, that he wrote an unusual letter of commendation to the Director of Health. The letter said that Jimmy's "consistency and attitude set him apart."



Consistency, attitude, caring, conscientious, dedicated, strong-willed are words we have heard that describe Jimmy. But there are other words as well – words that represent a different side of the man. Words like "karaoke", "body of steel/mind of mush" and my personal favorite, "burped out loud." Jimmy sure made an impression.

To me he was "passionate,' "stubborn" and "good humored." He felt strongly about what was right and wrong. He held on to, and was willing to fight for his beliefs – but he was always willing to see the humor in a situation and diffuse a conflict with a light touch and a self-deprecating remark.

Jimmy worked his way up in the DOH serving as manager of the Vector Control Branch, Deputy Director for Environmental Health and Division Chief for the Environmental Protection/Health Services Division and the re-organized Environmental Health Services Division. He fought hard to create the new modern Vector Control lab and offices that will open this year in Halawa Valley.

Jack Lewin, former Director of Health, when appointing Jimmy to serve as Division Chief said, "Jimmy has been a tower of strength" while leading his staff and accepting the tough jobs that needed to be done.

After more than 30 years of service, Jimmy wrestled with the concept of leaving the Department. He had seen more than his share of frustration over the years, but he remained passionate and loyal to his vow to protect public health.

I remember him coming to my office and telling me "I'm an old fut already. It's time to let someone else take over." And yet I know that the thought of leaving public service pained and haunted him. When he did write a letter announcing his retirement it included the following sentence. "I learned a lot about the diametric conflict between government procedures and public health philosophy." Jimmy was philosophical about leaving . . . and hopeful that some day we would find a way to get all the rules and regulations fixed so the right things could be done.

Bringing the latest information and training to DOH employees was one of Jimmy's passions. In this, he never left us. Jimmy spearheaded the re-creation of the Hawaii Environmental Health Association. He served as its new president and worked literally, to his dying day, to bring knowledge and skills to our DOH workforce. He organized the annual conference at the Ala Moana Hotel that brought more that one hundred health workers together to learn about emergency response, sanitation, indoor air, swimming pool issues vector-borne infectious diseases and much more. Jimmy stood at the podium and in his unassuming way introduced expert presenters and contentious topics.

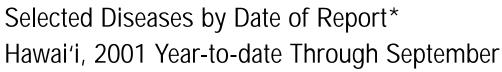
This is his legacy. Jimmy has not really gone. We will benefit from his passion for many years to come. He made Hawaii a safer and healthier place for us all. I can think of no higher calling in life.

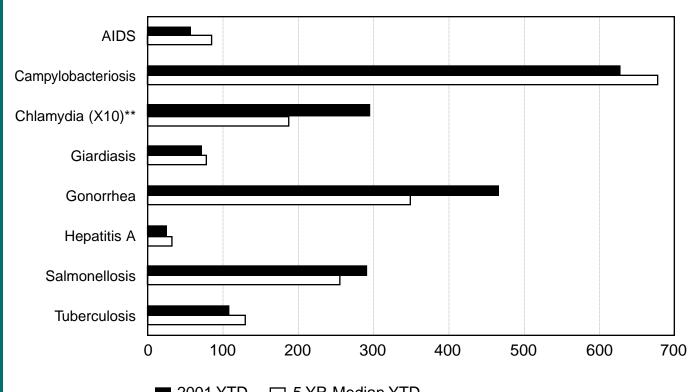
While we are saddened by his passing, we are proud to have known and worked with him. Thank you Jimmy for sharing yourself with us all.

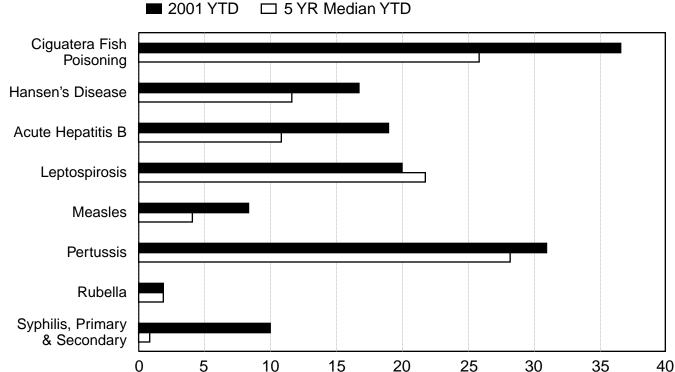
Aloha, Jimmy Ikeda!

Submitted by Gary L. Gill, Deputy Director for Environmental Health.

Communicable Disease Surveillance







^{*} These data do not agree with tables using date of onset or date of diagnosis.

^{**}The number of cases graphed represent 10% of the total number reported.

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Communicable Disease Report

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November/December 2001

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